

Claims

1. Sliding bearing composite material comprising a metallic support layer, an optional porous carrier layer disposed thereon, and a lead-free sliding layer forming a sliding surface for a sliding partner, with a sliding layer material on the basis of plastic including PEEK and with a lubricant in the form of zinc sulfide and/or barium sulfate, characterized in that the sliding layer material comprises PEEK as a matrix-forming plastic component, the lubricant in the form of 3-15 weight% of zinc sulfide and/or barium sulfate, and a hardening component in the form of 3-15 weight% of titanium dioxide and additionally 5-25 weight% of carbon fibers and 5-15 weight% of graphite particles.
2. Sliding bearing composite material according to claim 1, characterized in that the lubricant is present in the form of fine particles with a D50 value of the particle size of maximally 500nm, preferably maximally 400nm.
3. Sliding bearing composite material according to claim 1 or 2, characterized in that the hardening component is present in the form of fine particles with a D50 value of the particle size of maximally 500nm, preferably maximally 400nm.
4. Sliding bearing composite material according to any one of the claims 1 through 3, characterized in that the carbon fibers have a length of 50-250 μ m, in particular 60-150 μ m.
5. Sliding bearing composite material according to any one of the claims 1 through 4, characterized in that the carbon fibers have a thickness of 8-15 μ m.